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State-of-Art: LCA in the Nordic Region

Status of Life Cycle Assessment (LCA) Activities in the Nordic Region

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Abstract

The status of Life Cycle Assessment (LCA) activities in the Nordic Region (period 1995-97) is presented, based on more than 350 reported studies from industrial companies and research institutes in Sweden, Denmark, Norway, and Finland. A large number of industrial sectors is represented, with car components, building materials, pulp and paper products, electronic components and packaging as the most important ones. All aspects of LCA methodology are used: 90% use impact assessment, 80% impact assessment and valuation step. In most studies, more than one valuation method is used for ranking environmental impacts.

LCA studies are well integrated in the business activities in

many large Nordic corporations. From the early attempts, more familiar with LCA methodology, LCA has been integrated in strategy development, product development, process development and, to some extent, marketing. LCA has not only been used in the strict sense presented in the ISO 14040-43 standards. The systems approach, which is the basis for LCA, has also been modified and used in Sustainable Product Development, and in Environmental Performance Indicator and Product Declarations development. Future applications should be within Environmental Impact Assessments.

Keywords: Applications; industrial sectors; LCA software systems; Life Cycle Assessment (LCA); methodology; nordic region; status report